of a man. It is clear of course that the equation cannot be pressed too far; as to the value of the result found, we do not feel ourselves competent to judge. The work may, however, be of interest as an example of the analysis of somewhat complex experimental results by simple graphical methods.

Table III.—Calculated Values of H by Equation (5) for the various Constant Rates of Work, W, used in the Experiments, and the corresponding Observed Values of same.

Mass.	W = 0.		W = 13.		W = 19.		W = 43.		W = 56.	
kgrm.	Calc. H_0.	Obs. H.	Calc. H.	Obs. H.	Calc. H.	Obs. H.	Calc. H.	Obs. H.	Calc. H.	Obs. H.
0	−138		24		99		398		562	
20·0	− 48		45		88		259		352	
43·7	59		120		149	177	263	279	319	346
54·6	108		161	160	186	193	284	280	338	335
55·7	113		166	169	190		287	285	340	
58·8	127		178	181	201		295	298	346	
60·5	134		184		206	212	299	317	348	347
61·9	141		190	186	212	216	303	306	352	348
66·7	162		208	209	230		315	324	362	352
80·0	222		263		281		356		397	

On the Fossil Floras of the Wyre Forest, with Special Reference to the Geology of the Coalfield and its Relationships to the Neighbouring Coal Measure Areas.

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(Communicated by Prof. T. McKenny Hughes, F.R.S. Received May 20,—Read June 5, 1913.)

(Abstract.)

In the absence of any detailed knowledge of the geology of the Wyre Forest Coalfield, the area may be temporarily sub-divided into four regions. Fossil floras are described from three of these: from the horizon of the Sweet Coals in the Highley area in the north, from the unproductive beds of the Dowles Valley in the centre, and from the horizon of the Sulphur Coals of the Southern or Mamble area. On the evidence of the plants the Sweet Coal Series is shown to belong to the Middle Coal Measures, while the Sulphur Coal Series, overlying the Sweet Coals unconformably, belongs to a higher horizon, the Transition Coal Measures. The Dowles Valley unproductive measures are shown to be Middle Coal Measures, which are there over 1000 feet in

thickness. The Middle Coal Measure flora of the Wyre Forest includes 55 species, of which three are new, two of them being new species of *Sigillaria,* and one, a new type of seed-impression. Four other plants are new records for Britain. The Transition Coal Measure flora is smaller, but includes 20 species, of which one is a new British record.

It is shown that both the Middle and Transition Coal Measures of the Wyre Forest Coalfield consist of red-grey measures with Espley rocks. In the Transition Coal Measures *Spirorbis*-limestones also occur. The distribution of these rocks is considered in detail.

The Wyre Forest is discussed in relation to the other coalfields of the Welsh Borderland. The lower or productive measures of Coalbrookdale, and also the coals of the Titterstone Clee Hill are shown, on the plant evidence, to be Middle Coal Measures. A species of *Cordaicladus* new to Britain is described from the latter coalfield. It is pointed out that the Coalbrookdale-Wyre Forest field really consists of four distinct coalfields, in part superimposed on one another. Two of these, the Lower Series of Coalbrookdale and the Sweet Coal Series in the Wyre Forest, are of Middle Coal Measure age. These are quite separate areas, and are in part overlain unconformably by two other coalfields of Transition Coal Measures, one connecting Coalbrookdale and the Wyre Forest, and the other confined to the southern part of the Wyre Forest, overlying Old Red Sandstone.

It is contended that the coalfields of Shrewsbury, Le Botwood, Coalbrookdale, Wyre Forest, Titterstone Clee Hill and probably Newent form a related series, which, with the exception of the Lower Series of Coalbrookdale, is quite distinct lithologically from the Midland and Southern Pennine coalfields. If this is the case, it is pointed out that the theories of the originally continuous sheet of measures, and of subsequent excessive denudation of the Welsh Borderland, are inaccurate hypotheses, which should be abandoned.

Intermittent Vision.

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(Received November 11,—Read December 11, 1913.)

[This paper is published in 'Proceedings,' Series A, vol. 89, No. 612.]